Space Network Ground Segment Sustainment Program Code 458 Contract Deliverables Requirements List (CDRL)

EFFECTIVE: TBD EXPIRES: TBD

Goddard Space Flight Center Greenbelt, Maryland



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1. INTRODUCTION

This document provides the Contract Data Requirements List (CDRL) of the Data Items (DI) that **shall** be provided by the SN Ground Segment Sustainment (SGSS) contractor as data deliverables in support of the SN Ground Segment development. Section 1.0 includes the introduction and the description of the CDRL document. Section 2.0 provides definitions for the identification, delivery and acceptance of the CDRL DIs. Section 3.0 provides a summary listing of the CDRL DIs with the related identification number, proposal inclusion, acceptance, and submission information. Section 4.0 provides the Data Item Description's (DIDs) for each CDRL DI in section 3.0.

2. IDENTIFICATION, REFERENCE, DELIVERY, AND ACCEPTANCE

The transmittal letter and/or email for all deliverables **shall** be addressed to the SN Ground Segment Sustainment Contracting Officer at:

TBD

The following definitions and instructions apply to Tables 11 through 10.

2.1 ID

The information in the ID column identifies the Data Item by functional category and a sequential number within that category. The data item prefixes and the associated functional categories are listed below.

| Data Item Prefix | Functional Category |
|------------------|----------------------------------|
| PM | Program Management |
| СМ | Configuration Management |
| IS | Information Security |
| SE | System Engineering |
| RE | Review Packages |
| SW | Development |
| IT | I&T and Transition to Operations |
| MA | Safety and Mission Assurance |
| TR | Training |
| ОМ | Maintenance and Operations |

Table 1 – Data Item Prefix and Associated Functional Category

2.2 Title

The CDRL Title describes the required data, or document that is traceable to specific elements of the functional category breakdown structure.

2.3 Reference

The reference is the Statement of Work (SOW) or other requirement associated with the Data Item.

2.4 Proposal

An "X" in this column indicates that a preliminary version of the Data Item shall be included with proposal.

2.5 Contract Submission

Submission Information includes:

2.5.1 Maturity Information

Initial: The initial submission of an item. To be completed with available information as of the time of preparation for the due date.

Update: The best up-to-date information available at the time. Any updates **shall** require the same "approval/review" process as was required for the previous submissions.

Final: The complete thorough submission of an item for approval, review, or information.

2.5.2 Additional Definitions

Meaning for terminology used in CDRL is as follows:

The term "shall" designates a requirement. The terms "will" and "is" designate statements of fact.

The term "(TBD)" means, "To Be Determined", applied to a missing requirement means that the contractor determines the missing requirement.

The term "(TBR)" means, "To Be Reviewed". This is applied to requirements or values that are subject to review by the Government and the contractor. The "TBR" merely provides an indication that the value has the potential to change in a future modification.

The term "(TBS)" means, "To Be Supplied", identifies missing or incomplete information, values, or data needed to fulfill a requirement. The Government will furnish values for items identified by a TBS. The Government will provide a date or milestone for each TBS requirement".

The term "SGSS Contractor Development" (SGSSCD) is applied to the SGSSCD architecture and functionality being provided directly by the SGSS contractor, hereafter referred to as "contractor".

The term "SGSS Associate Developments" (SGSSAD) specifies SGSS architecture and functionality being provided by associate activities, such as antenna, telecommunications, user interface, and algorithms. Some of

these may be provided to the SGSSCD as GFP to be delivered as part of the SGSSCD deliverables while other GSADs will supply interface(s) for the SGSSCD

The term ATP means Authority to Proceed.

The term ATO means Authority to Operate

The term DACA means days after contract award.

The term Monthly means monthly by the 15th of each month or as required or as modified by CO.

The term Bi-weekly means submitted with Bi-weekly Status Reports by Tuesday close of business or as modified by CO.

The term Weekly means submitted weekly by Friday close of business or as modified by CO.

The term Days means unless indicated otherwise, calendar days.

The term POP means Period of Performance referring to contract POP.

The term As Generated means After each initial edition, revision, addition. Items that are critical to schedule, performance, or interface **shall** be transmitted to Ground Segment Project within 48 hours of generation.

The term As Required means items updated and delivered as required at the direction of the CO.

2.5.3 Delivery Format

Unless otherwise indicated under Hard Copy, all data items **shall** be delivered in electronic format to a SGSS Project specified web portal. Electronic deliverables **shall** be delivered in the following formats unless otherwise approved by the CO:

- Text Documents: Microsoft (MS) Word
- Presentations: MS PowerPoint
- Spreadsheets: Microsoft Excel
- Database: Delimited ASCII files accompanied with database schema document defining tables and entries.
- Schedules: MS Project
- Schematics and Drawings: PDF and Microsoft Visio
- Photographs: JPEG or current industry standard.
- Video: Any readily available open standard (e.g., AVI, MPEG)

For hardcopy deliverables, the number of copies is indicated in the Hard Copy column. All hardcopy deliverables **shall** be delivered to:

SGSS Project Documentation Manager

Address (TBS)

Hard Copy includes data that is typed, drawn or printed on paper by common conventional practices. If required, the original, a reproducible or the record copy **shall** be produced, or reproduced, for distribution as printed copies.

Electronic format deliverables shall have file names that indicate the CDRL number and the contract submission type. For example CDRL-PM-01-Initial.

The title page of all CDRLs shall contain the CDRL number, contract submission type and the date.

2.6 Contract Acceptance Code

The following codes apply to all submissions of the CDRLs (i.e., initial, final, and updates) as identified in Table 2.

A –Approval –Documents in this category **shall** require submission to the SGSS Project within the time specified and written approval prior to Contractor implementation. Requirements for resubmission **shall** be as specified in letter(s) of disapproval. The SGSS Project will act on items requiring approval within 30 days of receipt of the item.

R –Review –Documents in this category **shall** be submitted to the SGSS Project within the time period specified, and will be subject to evaluation. These documents **shall** be implemented upon issuance unless otherwise noted. However, when an evaluation reveals inadequacies in a document, the Contractor **shall** correct the document as required.

I –Information –Documents in this category will be used by the SGSS Project to determine current project status and progress and for future planning requirements.

2.7 Format

Unless otherwise specified in the individual Data Item Description, contractor format is acceptable.

2.8 Documentation Change Procedures

The documentation change procedures that **shall** be followed are described below.

- The contractor **shall** issue documentation change notices (DCNs) whenever minor changes or updates occur in data items that have been delivered to the Government.
- Change bars **shall** be used to indicate changes or updates.
- When major changes to a document are made, a complete revision of the document **shall** be issued and delivered to the Government.

2.9 Document Markings

Documents containing materials or information covered and controlled by International Trafficking in Arms Regulations (ITAR) or Export Administration Regulation (EAR) regulations, as determined by the contractor,

shall be so marked on the cover and on pages containing such materials. Documents containing contractor Proprietary materials or information, as determined by the contractor, **shall** be so marked on the cover and on pages containing such materials.

Documents **shall** not be unnecessarily or unjustifiably marked with restrictive or limiting labels, nor **shall** such labeling be applied frivolously.



3. CONTRACT DATA REQUIREMENTS LIST

Tables 1 through 11 are the Contract Data Requirements List. See Section 2.0 for explanation of terms. 3.1 Project Management

3.1 Program Management

| ID | Title | Ref ¹ | | Contract Acceptance Code | | | |
|-------|---|----------------------------|-------------|--------------------------------|---------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| PM-01 | Project Management Plan | SOW 112 3.14.1.1 | 30 DACA | 90 DACA | | | А |
| PM-03 | Integrated Master Schedule | SOW 115 242 3.14.1.1 | | 30 DACA | monthly | | A |
| PM-04 | Subcontract Management Plan | SOW 414 | 30 DACA | 90 DACA | | | А |
| PM-05 | Small and Disadvantaged Business Subcontract Plan | | | 90 DACA | | | А |
| PM-06 | Monthly Project Status Review (MPSR) | SOW 241 | | Monthly | | | I |

¹ SOW Reference

| ID | Title | Ref ¹ | | Contract Subm | ission | | Contract Acceptance Code |
|-------|---|------------------|--------------------|---|--|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| PM-07 | Weekly Status Reports | SOW 587 | | Every week | | | I |
| PM-08 | Meeting Minutes | SOW 417 | Meeting + 1 day | | | | R |
| PM-09 | Contract Performance Report (CPR) | SOW 130 | | After the 15 th day of the month of contract award | On the 15 th day of the month | | R |
| PM-10 | Earned Value Measurement System (EVMS) Plan | SOW 418 216 | | IBR-6 weeks | | | R |
| PM-11 | Integrated Baseline Review (IBR) Data Package | SOW 126, 116 | IBR-6 weeks | IBR | Upon approved rebaseline | | R |
| PM-12 | Financial Reports | SOW 585 | | Monthly per NPR 9501.2D Quarterly per | Due the 15 th Day of the month | | R |

| ID | Title | Ref ¹ | | Contract Submi | ssion | | Contract Acceptance Code |
|-------|---|--|-------------|----------------|---|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| | | | | NPR 9501.2D | | | |
| PM-14 | Risk Management Plan | SOW 133 | 60 DACA | 90 DACA | MDR – 2 weeks | | A |
| PM-15 | Risk Report | SOW 135 SOW 137 | 90 DACA | | Monthly | | R |
| PM-17 | Discrepancy Report | SOW 3.9 SOW 378 SOW 436 SOW 386 SOW 387 MAR 180 | | As Generated | | | CAT I&II – A Cat III & V - R |
| PM-18 | Action Items | SOW 526 | | As Generated | | | CAT I&II – A Cat III & V - R |
| PM-19 | Cost Analysis Data Requirements (CADRe) | SOW 584 | 60 DACA | 60 DACA | PDR-45d, CDR+45d, Project Delivery | | А |

| ID | Title | Ref ¹ | | Contract Submission | | | Contract Acceptance Code | |
|-------|---|--------------------|--|-------------------------------|-------------------------------|---------|--------------------------------|---|
| | | | | Preliminary | Final | Updates | Hard copy | |
| | | | | | | +90d | | |
| PM-20 | Option Management and Implementation Plan | SOW 620 SOW 621 | | 30 Days After Option Start | 60 Days after Option Start | | | А |

3.2 Configuration Management

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|---|--------------------|----------------|--------------|--------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| CM- 01 | Configuration Management Plan | SOW 139 | 60 DACA | 90 DACA | As required | | А |
| CM- 02 | SGSS Document Tree | SOW 593 | MDR-2 weeks | PDR-2 weeks | CDR – 2 weeks | | R |
| CM- 04 | SGSS Drawing Tree | SOW 594 | PDR-2 weeks | CDR-2 weeks | CDR + 30 days | | R |
| CM- 05 | Configuration Item Identification List (CIIL) | SOW 551 | PDR-2 weeks | CDR-2 weeks | CDR + 30 days | | R |
| CM- 08 | Configuration Control Board Minutes | SOW 546 | | As generated | | | R |
| CM- 09 | Engineering Change Requests | SOW 592 | | As generated | | | А |
| CM- 11 | Waiver Request | SOW 144 MAR 102 | | As generated | | | A |

3. Program Security

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|---|---------|------------------|------------------|---|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| PS- 01 | IT System Security Plan | SOW 196 | MDR-2 weeks | PDR | CDR, every 3 years and whenever a significant system changes occurs | | A |
| PS- 02 | IT Systems Security Assessment | SOW 198 | PDR-2 weeks | ATO-3 months | Annually and whenever a significant system change occurs | | А |
| PS- 03 | IT Security Risk Assessment | SOW 198 | PDR-2 weeks | ATO-3 months | Every 3 years and whenever a significant system change occurs | | А |
| PS- 04 | IT Contingency Plan | SOW 199 | PDR-2 weeks | ATO-3 months | CDR and whenever a significant system changes occurs | | А |
| PS- 05 | Certification and Accreditation Support Documentation | SOW 200 | PDR – 2 weeks | ATO – 3 weeks | Every 3 years and whenever a significant system change occurs | | А |
| PS- | Interconnection Security Agreement | | PDR – 2 weeks | ATO- 3 weeks | CDR, When there are external interface | | R |

| ID | Title | Ref (1) | Contract Submission | | | | |
|-----|-----------------------|---------|---------------------|-------|--|------|---|
| | | | Preliminary | Final | Updates | Hard | |
| | | | | | | сору | |
| 06 | | | | | changes or significant | | |
| | | | | | system changes | | |
| PS- | Program Security Plan | | 90 DACA | | Every 3 years and | | А |
| 09 | | | | | whenever a significant program change occurs | | |

3.4 Systems Engineering

| ID | Title | Ref (1) | Ref (1) Contract Submission | | | | | | |
|-----------|--|--------------------|-----------------------------|------------------|------------------------|---|--------------|---|--|
| | | | | Preliminary | Final | Updates | Hard copy | | |
| SE- 01 | Systems Engineering Management Plan (SEMP) | SOW 264 | | 90 DACA | SRR – 2 weeks | | | А | |
| SE- 27 | Technology Assessment Report | | | SRR – 2 weeks | PDR – 2 weeks | | | R | |
| SE- 10 | Technology Development Plan | SOW 368 | | MDR – 2 weeks | PDR – 3 weeks | CDR – 3 weeks | | А | |
| SE- D2 | SGSS System Requirements Document | SOW 268 SOW 291 | | | SRR – 2 weeks | MDR – 3 weeks | | А | |
| SE- 03 | SGSS Concept of Operations | SOW 268 SOW 473 | | | 90 DACA months | SRR – 3 weeks MDR – 3 weeks PDR – 3 weeks CDR – 3 weeks | | А | |
| SE- 04 | SGSS Element Requirements Specification | SOW 268 SOW 291 | | MDR-2 Weeks | Element PDR-3 weeks | Element PDR+ 60 Days | | А | |

| ID | Title | Ref (1) | Contract Submission | | | | | |
|-----------|---|--------------------|------------------------------|-----------------------|--|--------------|---|--|
| | | | Preliminary | Final | Updates | Hard copy | | |
| SE- 05 | SGSS Element Software Requirements Specifications | | Element SWRR – 3 weeks | Element PDR - 3 weeks | PDR + 60 days | | R | |
| SE- 07 | Requirements Verification Traceability Matrix | SOW 385 | SRR-2 Weeks | MDR-3 weeks | PDR – 3 weeks, CDR – 3 weeks, TRR – 3 weeks, SAR – 3 weeks | | R | |
| SE- 08 | SN External Interface Requirements Documents | SOW 279 SOW 291 | | | SRR – 3weeks MDR – 3 weeks MDR+ 60 Days | | A | |
| SE- 09 | SN External Interface Control Documents | SOW 279 | | | MDR – 3 weeks PDR –3 weeks CDR - 3 weeks | | А | |
| SE- 27 | SGSS Internal Interface Requirements Document | | MDR – 3 weeks | PDR –3 weeks | CDR - 3 weeks | | А | |
| SE- | SGSS Internal Interface Control Document | SOW 268 | PDR - 3 | CDR –3 | TRR-2 weeks | | R | |

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----|---|---------|--------------|--------------|--------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| 28 | | | weeks | weeks | | | |
| SE- | SGSS Architecture Description Document | SOW 268 | MDR – 3 | PDR – 3 | CDR – 2 weeks s | | R |
| 11 | (ADD) | | weeks | weeks | | | |
| SE- | SGSS Element Design Description | SOW 268 | Element | Element | Element CDR+ 60 Days | | R |
| 12 | | | PDR-3 Weeks | CDR-3 weeks | | | |
| SE- | Studies and Trades | SOW 282 | As required | As required | As required | | R |
| 16 | | | | | | | |
| SE- | Modeling and Simulation Plan | SOW 285 | SDR- 3 weeks | CDR – 3 | CDR + 60 days | | R |
| 17 | | | | weeks | | | |
| SE- | Modeling and Simulation Analysis Report | SOW 287 | | As required | As required | | R |
| 18 | | | | | | | |
| SE- | SGSS Performance Verification Plan | SOW 290 | PDR - 3 | CDR - 3 | As required | | А |
| 19 | | | weeks | weeks | | | |
| SE- | SGSS Performance Verification Reports | SOW 294 | - | Within 30 | As required | | R |
| 20 | | | | days of each | | | |
| | | | | verification | | | |

| ID | Title | Ref (1) | | Contrac | t Submission | | Contract Acceptance Code |
|-----------|--|---------|-----------------|---------------------------|---------------|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| | | | | event | | | |
| SE- 21 | Engineering Peer Review Plan | | ATP + 30 days | ATP + 90 days | As required | | R |
| SE- 22 | Engineering Drawings | SOW 593 | CDR – 1 week | 1 week prior to PSR(s) | As required | | I |
| SE- 23 | Product Definition and Users' Guide Document | | CDR- 3 weeks | SAR – 3 weeks | SAR + 60 days | | R |
| SE- 24 | Engineering Peer Review Data Packages | SOW 307 | | AS required | | | R |
| SE 25 | Technology Refresh and Sparing Plan | SOW 548 | PDR- 3 weeks | CDR – 3 weeks | yearly | | А |
| SE- 26 | Software and Systems Metrics Report | SOW 243 | SRR+30 | | monthly | | R |

3.5 Review Packages

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|--|------------|-------------------|-------------------|--------------------------------|--------------------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| RE- 01 | Systems Requirements Review (SRR); SGSS Input Package | SOW 549 | SRR – 2 weeks | SRR + 30 days | | 40 Color 60 B&W | R |
| RE- 02 | Mission Definition Review (MDR) ; SGSS Input Package | SOW 549 | MDR – 2 weeks | MDR + 30 days | | 40 Color 60 B&W | R |
| RE- 03 | Software Requirements Review (SWRR); SGSS Input Package | | SWRR – 2 weeks | SWRR + 30 days | | 40 Color 60 B&W | R |
| RE- 05 | Preliminary Design Review (PDR); SGSS Input Package | SOW 549 | PDR – 2 weeks | PDR + 30 days | | 40 Color 60 B&W | R |

| ID | Title | Ref (1) | | Contract Subn | nission | | Contract Acceptance Code |
|-----------|--|------------|--------------------------|--------------------------|---------|--------------------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| RE- 06 | Element Preliminary Design Review (PDR); SGSS Input Package | SOW 562 | Element PDR – 2 weeks | Element PDR + 30 days | | 40 Color 60 B&W | R |
| RE- 07 | Element Critical Design Review (CDR); SGSS Input Package | SOW 562 | Element CDR – 2 weeks | Element CDR + 30 days | | 40 Color 60 B&W | R |
| RE- 08 | Critical Design Review (CDR); SGSS Input Package | SOW 549 | CDR – 2 weeks | CDR + 30 days | | 40 Color 60 B&W | R |
| RE- 12 | Production Readiness Review – First Article Review (PRR); SGSS Input Package | | PRR – 2 weeks | PRR + 30 days | | 40 Color 60 B&W | R |
| IT-03 | Pre-Shipment System Acceptance Review (SAR Data Package | SOW 226 | | | | 40 Color 60 B&W | R |

| ID | Title | | | Contract Subn | nission | | Contract Acceptance Code |
|------------|---|------------|------------------|---------------|---------|--------------------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| IT-07 | Operational Readiness Review (ORR) Data Package | SOW 456 | ORR – 2 weeks | ORR +30 days | | 40 Color 60 B&W | R |
| RE – 11 | Final Acceptance Review (FAR) Data Package | SOW 549 | FAR – 2 weeks | FAR + 30 days | | 40 Color 60 B&W | R |

3.6 Development

| ID | Title | Ref (1) | | Contract Subr | nission | | Contract Acceptance Code |
|-----------|--|------------|-------------------------|--------------------------|---------------|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| SW- 01 | Software Development and Management Plan | SOW 371 | 90 DACA | 120 DACA | | | А |
| SW- 14 | Software Configuration Management Plan | | SWRR-3 weeks | PDR + 30 days | CDR + 30 days | | A |
| SW- 15 | Software Engineering Improvement Plan | | SWRR- 3 weeks | PDR + 30days | | | A |
| SW- 11 | SGSS Software Design Descriptions | SOW 268 | Element PDR— 3 weeks | Element CDR – 3 weeks | CDR – 2 weeks | | R |
| SW- 12 | SGSS Database Design Descriptions | SOW 268 | Element PDR– 3 weeks | Element CDR – 3 weeks | CDR – 2 weeks | | R |

| ID | Title | Ref (1) | Ref (1) Contract Submission | | | | | Contract Acceptance Code |
|-----------|---|-------------------|-----------------------------|---------------|---|---------------|--------------|--------------------------------|
| | | | | Preliminary | Final | Updates | Hard copy | |
| SW- 16 | Software Data Dictionary | | | PDR – 3 weeks | CDR – 3 weeks | CDR + 30 Days | | R |
| SW- 02 | Software Test Plan | SOW 436 | | PDR- 2weeks | CDR-2weeks | As required | | А |
| SW- 03 | Detailed Software Test Plans and Procedures | SOW 436 | | TRR-60 days | TRR- 2 weeks | As required | | R |
| SW- 04 | Software Test Reports | SOW 436 | | | Within 15 days of test conclusion | As required | | R |
| 5W-)5 | Software Installation Plan | SOW 436 | | | SAR – 30 days | As required | | R |
| 5W- 06 | Software Release Delivery Package | SOW 436 SOW | | | With each release | As required | | R |

| ID | Title | Ref (1) | | Contract Subm | nission | | Contract Acceptance Code |
|-----------|-------------------------------|------------|-----------------------------|--|-------------|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| | | 469 | | | | | |
| SW- 17 | Software Maintenance Plan | | CDR – 3 weeks | SAR – 3 weeks | As required | | R |
| 5W- 07 | Software Maintenance Manuals | SOW 483 | First delivery – 3 weeks | 2 weeks prior to SGSS Acceptance review | As required | | R |
| 5W- 08 | Software Users Manuals | SOW 510 | First delivery – 3 weeks | 2 weeks prior to SGSS Acceptance review | As required | | R |
| 5W-)9 | Software Version Descriptions | SOW 436 | | For each software delivery | As required | | R |

| ID | Title | Ref (1) | | Contract Sub | mission | | Contract Acceptance Code |
|-----|--|---------|---------------|----------------------|---------------|--------------|--------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| SW- | Software Element Design Documents | SOW | | For each | As required | | R |
| 10 | | 436 | | software delivery | | | |
| | | | | delivery | | | |
| SW- | Software Inspection / Peer Review Report | | SWRR + 30 | Monthly | As required | | 1 |
| 18 | | | | | | | |
| SW- | Software Master Build Plan | sow | PDR | CDR | For each plan | | Α |
| 19 | | | | | change | | |
| SW- | Software Transition Plan | SOW | CDR – 2 weeks | TRR – 2 weeks | As required | | A |
| 20 | | | | | | | |

| ID | Title | Ref (1) | | Contract Subr | nission | | Contract Acceptance Code |
|-----------|---|------------|-------------------------|---|---------------|--------------|--------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| HW- 01 | SGSS Hardware Design Descriptions | SOW 688 | Element PDR- 3 weeks | Element CDR – 3 weeks | CDR – 2 weeks | | R |
| HW- 02 | Hardware Element Design Description | SOW 689 | PDR- 2weeks | CDR-2weeks | As required | | R |
| HW- 03 | Hardware Test Plan | SOW 698 | PDR- 2weeks | CDR-2weeks | As required | | A |
| HW- 04 | Detailed Hardware Test Plans and Procedures | SOW 698 | TRR-60 days | TRR- 2 weeks | As required | | R |
| HW- 05 | Hardware Test results | SOW 698 | | Within 15 days of test conclusion | As required | | R |

| | Preliminary | Final | T | | |
|-----|-------------|---------------|--------------|--------------------------|--------------------------|
| | | Final | Updates | Hard copy | |
| SOW | | SAR – 30 days | As required | | R |
| 700 | | | | | |
| sow | | For each | As Required | | R |
| 700 | | delivery | | | |
| | 700 SOW | 700 SOW | SOW For each | SOW For each As Required | SOW For each As Required |

3.7 Integration and Test

| ID | Title | Ref (1) | | Contract Acceptance Code | | | |
|-------|--|----------------|--------------------------|--------------------------------|-------------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| IT-01 | Integration and Test Plan | SOW 392 | PDR – 2 weeks | CDR – 2 weeks | CDR + 60 days and as required | | А |
| IT-02 | Detailed Integration Test Plans and Procedures | SOW 393 | 60 days prior to test | TRR / Test – 2 weeks | As required | | R |
| IT-04 | Post Test Data Packages | SOW 397 | Test + 2 weeks | | As required | | R |
| IT-05 | Site Survey | SOW 443 420 | PDR – 2 weeks | CDR – 2 weeks | As required | | R |
| | | | | | | | |

3.8 Mission Assurance

| ID | Title | Ref (1) | | Contract Subm | ission | | Contract Acceptance Code |
|-----------|--|--------------------|---------------------------------|---------------------------------|-------------|--------------|--------------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| MA- 02 | Mission Assurance Implementation Plan | MAR 112 | 60 Days After Contract Award | 90 Days After Contract Award | As Required | | А |
| MA- 03 | Quality Manual | MAR 116 | 60 Days After Contract Award | 90 Days After Contract Award | As Required | | R |
| MA- 04 | System Safety Program Plan | MAR 137 | SRR | CDR – 3 weeks | As Required | | R |
| MA- 05 | Safety Requirements Compliance Checklist | MAR 141 | PDR – 3 weeks | CDR – 3 weeks | As required | | R |
| MA- 06 | Preliminary Hazard Analysis | MAR 143 MAR 150 | PDR – 3 weeks | CDR – 3 weeks | As required | | A |

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|--|--|--------------------------|-----------------------------------|--------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| MA- 07 | Operations Hazard Analysis | MAR 147 | CDR – 3 weeks | Prior to Integration Testing | As Required | | A |
| MA- 08 | Verification Tracking Log | MAR 151 | CDR – 3 weeks | Prior to First Operational Use | As Required | | А |
| MA-)9 | Safety Variance | MAR 155 | As Soon As Identified | As soon as identified | | | А |
| MA- 10 | Mishap Contingency Plan | MAR 158 | PDR – 3 weeks | CDR – 3 weeks | As Required | | A |
| MA- 11 | Probabilistic Risk Assessment and Reliability, Maintainability and Availability Program Plan | MAR 161 MAR 167 MAR 178 MAR 222 | 60 DACA (R) | SRR – 30 days | Monthly Progress Updates | | A |

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|--|---|---------------|---------------|------------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| MA- 12 | RMA Prediction and Model Report | MAR 171 MAR 206 MAR 207 MAR 209 MAR 232 | PDR – 3 weeks | CDR – 3 weeks | As Required | | R |
| MA- L3 | RMA Demonstration Report | MAR 173 | PDR – 3 weeks | CDR – 3 weeks | As Required | | R |
| MA- L5 | Probabilistic Risk Assessment | MAR 184 | PDR – 3 weeks | CDR – 3 weeks | As Required | | А |
| MA- L6 | Failure Mode and Effects Analysis (FMEA) | MAR 187 | PDR – 3 weeks | CDR – 3 weeks | 3 weeks prior each milestone | | А |
| | Critical Items List (CIL) | MAR 187 | PDR – 3 weeks | CDR – 3 weeks | 3 weeks prior each milestone | | А |

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|--|--------------------|---------------|----------------------|--------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| MA- 17 | Fault Tree Analysis (FTA) Qualitative | MAR 201 | PDR – 3 weeks | CDR – 3 weeks | As required | | R |
| | Fault Tree Analysis (FTA) Quantitative | MAR 201 | | With PRA analysis | As required | | А |
| MA- 18 | Parts Stress Analysis | MAR 203 | | CDR - 45 days | Within 30 days of change | | R |
| MA- 19 | Worst Case Analysis | MAR 205 | PDR – 3 weeks | CDR – 3 weeks | Within 30 days of change | | R |
| MA- 20 | Trend Analysis | MAR 212 MAR 213 | As required | As required | As required | | R |
| MA- 21 | Limited-Life Items List | MAR 214 | PDR – 3 weeks | CDR – 3 weeks | Within 30 days of change | | А |

| ID | Title | Ref (1) | | | Contract Acceptance Code | | |
|-----------|---|--------------------|------------------|---------------|--------------------------------|--------------|---|
| | | | Preliminary | Final | Updates | Hard copy | |
| MA- 22 | Life cycle cost model and prediction report | MAR 217 | PDR – 30 days | CDR – 30 days | As required | | R |
| MA- 23 | Software Quality Assurance Plan | MAR 220 MAR 234 | MDR – 2 Weeks | PDR – 2 Weeks | As Required | | A |
| MA- 24 | EEE Parts List | MAR 247 | PDR – 2 Weeks | CDR – 2 Weeks | As Required | | A |
| MA- 25 | Equipment Identification List (EIL) | MAR 252 | PDR – 1 month | CDR – 1 month | As Required | | A |
| MA- 26 | Lead-free Control Plan | MAR 256 | PDR – 3 weeks | CDR – 3 weeks | As Required | | A |
| ЛА- 27 | ESD Control Plan | MAR 264 | PDR – 2 Weeks | CDR – 2 Weeks | As Required | | A |

3.9 Training

| Table 10 – SGSS Contract Data Requirements List – Training | | | | | | | | |
|--|------------------------|---------|--|--|---|--------------------------------|--------------|---|
| ID | Title | Ref (1) | | | | Contract Acceptance Code | | |
| | | | | Preliminary | Final | Updates | Hard copy | |
| TR-01 | Training Plan | SOW 401 | | PDR – 2 weeks | CDR – 2 weeks | CDR + 30 days | | А |
| TR-02 | Training Documentation | SOW 404 | | 8 weeks before first training session | 3 weeks before first training session | | | R |
| TR-03 | Wall Chart | SOW 409 | | CDR – 2 weeks | CDR + 30 days | As required | | R |

3.10 Maintenance and Operations

| ID | Title | Ref (1) | | Contract Submission | | | | |
|-----------|--|--------------------------------------|------------------------------------|---------------------|---------------------|--------------|---|--|
| | | | Preliminary | Final | Updates | Hard copy | | |
| MO- 01 | Transition and Operations Support Plan | SOW 468 SOW 569 | MDR – 2 weeks | PDR – 2 weeks | CDR and As required | | A | |
| MO-)2 | Maintenance Plan | SOW 481 | CDR- 2 weeks | ORR – 30 days | | | R | |
| MO-)3 | Maintenance Records | SOW 482 | One month after start of I&T | Monthly | | | I | |
| MO-)4 | Logistics Analysis | SOW 493 | PDR | CDR | | | R | |
| MO- 05 | Logistics Support Plan | SOW 495 496 497 498 MAR 175 | CDR - 2 weeks | ORR – 2 weeks | | | I | |

| ID | D Title | Ref (1) | | Contract Subm | nission | | Contract Acceptance Code |
|-----------|-----------------------------------|---------|--|-------------------------|-------------|--------------|--------------------------|
| | | | Preliminary | Final | Updates | Hard copy | |
| MO- 07 | Operations Handbook | SOW 517 | 3 weeks before first hardware or software delivery | 3 weeks prior to SAR | As required | | R |
| MO- 08 | Operations and Maintenance Manual | SOW 517 | 3 weeks first hardware or software delivery | 3 weeks prior to SAR | As required | | R |
| MO- 09 | Mission Operations Procedures | SOW 514 | SAR – 2 weeks | ORR – 2 weeks | | | R |
| MO- 10 | Contingency Operations Procedures | SOW 514 | SAR – 2 weeks | ORR – 2 weeks | | | R |

3.11 Technical Studies

| | Table 12 – SGSS Contract Data Requirements List Technical Studies | | | | | | | |
|-------|---|---------|--|---------------------|-------------|-------------|--------------|--------------------------------|
| ID | Title | Ref (1) | | Contract Submission | | | | Contract Acceptance Code |
| | | | | Preliminary | Final | Updates | Hard copy | |
| TS-01 | Technical Studies | SOW 167 | | | As required | As required | | R |

4. DATA ITEM DESCRIPTIONS

